

PORSE
11.3.31.5.1

Childs, John

From: McFarland, JK (Jane)
Sent: Friday, November 10, 2000 4:21 PM
To: Moulton, Robert
Cc: Childs, John; Hermans, Marcel; Ring, Jeffery (Jeff); Quinn, Padraic (Pad); Mishaga, Rick; Rennis, Denise; Degens, Sebastian; White, Christine (Chris)
Subject: FW: Response to T-6 Comments of Permit Renewal

7343

Please see my comments embedded in the Response.doc below.
Chris- any chance you can help smooth out some the edge on this letter?

jane

—Original Message—

From: Moulton, Robert
Sent: Friday, November 10, 2000 12:47 PM
To: Childs, John; Hermans, Marcel; Ring, Jeffery (Jeff)
Cc: McFarland, JK (Jane); Quinn, Padraic (Pad); Rennis, Denise; Mishaga, Rick
Subject: Response to T-6 Comments of Permit Renewal

Response to T.doc

Here is a draft response to the two letters we received on T-6. I have asked several of you for verification or additions. It is perhaps a bit too detailed, but sometimes you need to hit the opposition with a 2x4. John, you may want to look at the TBT discussion for the Corp' NMFS letter. Can we get comments next

week? NWEA T6
comments.doc

Due wed / Thurs

Science

See

USEPA SF



1286342

Response to T-6 Comments of Permit Renewal

The Port of Portland has requested a five-year renewal of the programmatic maintenance-dredging permit for T-6. The Corps of Engineers received 2 comments on the application. Our response to each comment follows.

Ms. Lyn Mattei, Wetland Coordinator for Sierra Club comments

The following responds to the three points raised by Ms. Mattei. Our understanding is that Craig Fryer is the Chair of the Columbia Group of the Sierra Club that represents 6000 Oregon members. *(Perhaps these comments and our response needs to be sent to him as well to assure the Club is aware of these efforts in their name.)*

1. The sediments in the material to be dredged contains contaminants. They tested high in Tribunal (sic) 10 and were flagged for DDT with a reported 49 rating. The DDT (sic) tests way above the bio accumulation trigger. This makes safe upland disposal difficult to find. Terminal 6 contains toxic contaminants similar to those found in Portland Harbor, just upstream, and should be treated with the same caution and testing requirements. The results should be carefully analyzed prior to any permit issuance.

The Port contracted with Hart Crowser to perform sediment quality tests at T-6 in 1998 employing EPA and Corps of Engineers approved testing procedures. Those tests showed tri-n-butyltin (TBT) exceeded the screening level of 0.15 micrograms per liter with a reading of .33 micrograms per liter. No TBT was found in samples taken in October and December of 1997. Tri-n-butyltin is a compound common to marine antifouling paints. Contamination by TBT is wide spread in coastal areas and generally occurs on surface sediments. As vessels make contact with docks, occasionally some paint is chipped off. At concentrations of 1 microgram/liter, TBT in paint can be toxic to some marine organisms. Some algae can degrade TBT at concentrations of 25 micrograms/liter. TBT undergoes sequential debutylation as it degrades. The kinetic degradation pathway completed by Jingfeng Feng, Univ. of Minnesota in 1995 shows TBT degrades to DBT then MBT and finally tin. Generally tri-substituted organotins are more toxic than di- and mono- substituted compounds. Sarradin *et al.* determined in 1995 that the half-life of TBT was approximately 2.1 years and those for DBT and MBT 1.9 and 1.1 years, respectively. I suggest we only include the last 2 sentences of the paragraph for the response on tri-n-butyltin. Sediment tests performed by Hart Crowser in 2000 showed TBT levels of 0.074 micrograms per liter for TBT and 0.01 micrograms per liter for DBT and MBT. Since tri-n-butyltin exceeded screening standards in 1998, an upland disposal site was selected.

The same samples (in 2000 or in 1998?) were tested for Total DDT against an LCRMA screening level of 6.9 micrograms per kilogram. This sediment characterization work at six locations at T-6 involved two phases. The phase I study indicated a low-level exceedence of the screening level standard for DDT in one sediment sample. A duplicate

sample from a second site was inconsistent and exhibited high analytical variability. Test levels for that second site showed readings of 8.96 and 52.07 micrograms per kilogram against a standard screening level of 6.9 and an ML of 69.0 micrograms per kilogram. Again, why show multiple years of data? Why not just discuss the 2000 test samples? Three additional samples analyzed in 2000 reflected values of 10.5, 7.9 and 9.7 micrograms per kilogram. These also are barely above screening level. Clearly Ms. Mattei has misread the data.

~~Ms. Mattei believes~~ Terminal T-6 is not located just below Portland Harbor. The map in the Public Notice shows T-6 is located 2 miles above the confluence of the Columbia with the Willamette River. Sediments are quite dissimilar between T-6 and Portland Harbor. Berth T-4 is located just below Portland Harbor and the Superfund site. The sediments at T-4 show elevated DDT values similar to those quoted by Ms. Mattei.

TS 503

2. The project description assumes that the dewatering process would produce clean enough liquid to return directly to the Columbia River. We are aware of no studies that verify that clean liquids come from contaminated spoils. The dewatering system and its product must be independently tested and approved before allowing disposal of dewatered liquids in the Columbia River.

The only contaminant to be disposed at the upland site is tri-n-butyltin. Since it is used in marine antifouling paints, it is designed not to be particularly water-soluble. EPA and Corps of Engineers establish Water Quality Concentrations for the water flowing from the disposed material. These are referred to as elutriate tests. Tests performed by Hart Crowser for TBT in 2000 indicated that the analytical result for TBT in the SPLF ~~SPLF~~ ^{SPLT} leachate was below the WQC*20 level. In the one-day elutriate test, TBT exceeded the draft EPA chronic criterion (a criterion meaning "to be considered") by about a factor of two. This draft criterion was also exceeded by the river supply water, indicating that background levels of TBT exist in Oregon Slough, probably as a result of shipping traffic. Commensurate with the rapid decrease in Total Suspended Solids, TBT will probably decline below the draft criteria within a few days of settling. No other chemical constituents exceeded their chronic (SL) or acute (ML) water quality criteria in the effluent from the one-day tests, including DDT. No chemical constituents exceeded their chronic or acute water quality criteria in the effluent from the seven-day test. Presumptively, if there are no other contaminants and the constituents are not present during a period when elutriates would be held on site, then elutriate flows will be clean. However, the Port intends to have an independent contractor analyze and test elutriate flows at the upland site during disposal.

3. The chosen disposal site on Port of Portland property just east of the dredge site appears in aerials to be filled wetland. The area is surrounded by a dike to enclose dredged spoils and some wetland vegetation appears to be emerging there. An aerial study should be performed to determine when this side (sic) was filled and whether the Port had obtained the required 404 and RF permits. Filling a wetland (sic) illegally does not justify further permitless (sic) fill and development.

The disposal site area was initially filled during the Corps dredging of Oregon Slough in the mid 1970's. (Marcel can we check the fill history here?). The Port performed a field wetland reconnaissance including plant identification at the site. Aerial inspection is not as reliable as on-site reconnaissance. Emergent wetland areas were avoided during site design through 50-ft setbacks. Since no in-water work is planned and the elutriate is certifiable as clean, no federal permits are required for the site. However the Port is securing a review of the proposed site by federal, State and local agencies to assure no resource values are impacted. All required permits have been applied for.

Ms. Nina Bell, NWEA comments.

In light of the potential for impacts on endangered aquatic species from this project, we believe it is premature for the Corps to invite public comment before the U.S. Fish and Wildlife Service and National Marine Fisheries Service have submitted their comments. Therefore, we are requesting an extension of the public comment period until those documents are available for public review.

The proposed action has been coordinated with the National Marine fisheries Service and the US Fish and Wildlife Service as a part of permit review. These agencies have raised no objection.

It is our opinion that the Corps cannot issue this permit for the reasons below, including that state law prohibits approval of activities that will contribute new loads into water quality limited streams, violate Oregon's antidegradation policies, and that the proposed project will cause and/or contribute to both short- and long-term violations of state water quality standards. The proposed project does not conform to Oregon water quality standards, Oregon's rules, or the 404(b)(1) Guidelines of the Clean Water Act.

Specifically, we are concerned with

- *the existence of contaminated sediments at Terminal 6 berths;*
- *sediment containment at the dewatering facility;*
- *the absence of wetland delineation at proposed dewatering facility;*
- *testing of effluent for contamination, and;*
- *the use of dewatered sediments as 'clean fill.'*

Please note above in response to Ms. Mattei. There is no degradation of water quality as a result of the proposed action.

I. Dredging of sediments at Terminal 6 berths

Dredging of contaminated sediments at Terminal 6 will result in the resuspension and redistribution of contaminants such as tributyltin and DDT. Results of sediment testing at this site were not made available in this public notice, despite the known presence of such toxins. Sampling and testing protocols for the sediment evaluation mentioned in the

project description, including locations and sample sizes were not articulated. Dredging of such sediments will result in localized turbidity and resuspension of contaminants making them available for reintroduction into the food chain.

None of the maps presented in the Public Notice materials include dates indicating when the hydrographic data was collected, nor tenant and ship design information upon which the dredge prism was based on. Furthermore, much of the information included on the maps was illegible, despite the fact that the information was not included in the text portion of the Public Notice and critical to gauge the scope of the proposed work. WE have requested copies of this material, but were unable to obtain it prior to the comment period deadline.

The above response to Ms. Mattei addresses many of these concerns. Clearly Ms. Bell also misread the test data for DDT. Though dredging will result in localized turbidity, we asked Hart Crowser to investigate Total Suspended Solids (TSS) and turbidity. In the column settling test approved by EPA, the turbidity and TSS data showed that significant clarification of the dredge slurry occurs within a few hours of ponding. However, supernatant (meaning the material immediately adjacent to the settled material) remains turbid and contains a high concentration of suspended solids a full day after settling. There is a large clarification of the entire water column between day two and day four, such that TSS decreased to an average concentration of 50 milligrams per liter and turbidity decreased to 75 NTU (an optical measurement of turbidity). Since dilutions of 10 to 100 are typically observed in the authorized mixing zones, this level of clarification should be adequate to comply with Oregon's water quality standard for turbidity. Most of the above processes are well known within the dredging community and have formed the basis for EPA's "Green Book" and the Corp's Inland Testing Manual.

The hydrographic data was obtained in June 2000 as shown by the map shows in the box on the bottom of the drawings. The Corps requires that these maps be provided at 8 x 11 1/2 (Public Notice dated September 25, 2000) for use on their web page. The docks service vessels requiring 39-40 feet of draft. Several logs removed from the site and 2000 show evidence of propeller strikes and bottoming. Copies of the material can be provided on request and are available at the Port as well.

II. Dewatering facility

The proposed dewatering facility is located on a site that has not undergone a wetlands delineation, though its close proximity to two existing wetlands might suggest that more wetland habitat might exist within the site boundaries. Aerial photography suggests the existence of vegetation on the east portion of the site, yet no inventory of the flora and fauna of the site was presented with this public notice.

See item 3 above. The Port performed an on the ground field wetland reconnaissance. As noted in the public notice, the permits for the disposal site is are being processed coincidentally with the T-6 permit by a separate action. (Marcel – is this correct?)

We find it difficult to believe that no environmental zone (E-zone) review would be required for a project of this size located just three feet from the E-zone boundary. No mention was given to the method by which the dewatered sediment would be contained within the site, particularly given its dubious 'clean' status and proximity to the E-zone. The 5-year duration of this permit would suggest that the dredging project would proceed off and on, to meet the annual needs of maintaining the five berths. However, the 10" HDPE supply and discharge pipes are said to be temporary on public notice materials, and in fact only in place 2-4 weeks. (personal communication, 11/6/00 Jane McFarland, Port of Portland) Since these pipes would not qualify as a utility corridor, we question the Port's interpretation that the project is exempt from E-zone review.

The dewatering facility and associated operations were designed to avoid wetlands and setback buffers. Any and all operations in the E-zone will be contained within the existing alignment of a hard-surface boat launch. No construction or operation activities on the dewatering facility site require a Land Use Review under Title 33 of the City of Portland Code. City environmental review staff were consulted and concurred with this assessment of the code.

The dewatered sediment will be removed to a landfill or used in construction at other locations in an locally-approved manner at other locations. Dredging for maintaining the berths will occur this year and perhaps twice during the five year period. Since dredging is expensive, the Port attempts to minimize the amount to be dredged, its duration and the amount to be placed at the disposal site. Locations not requiring 40-foot depths are not maintained any deeper than needed to service the current customer. The facility was designed to avoid the need for an e-zone review and thus minimize impacts to the waterfront.

(I question whether Ms. McFarland is correct in her characterization of the supply and discharge pipes. Marcel can you check with Walt and provide the correct characterization? This is the characterization I was given by Walt Haynes and Marcel Hermans and by which the in-house determination was made that the operation could proceed this dredge season without pursuing a Land Use Review for activity in the E-zone. In the future we need to be very careful of what we say to groups such as NWEA without our attorney or another staffer present. And we need to be very careful that we are consistent in what we say to each other about project operations.)

The public notice made vague reference to sediment testing before dredging and disposal activities, but lacked mention of testing that would be performed on effluent from the facility. Before the water is released back into the Oregon Slough, we would expect that it would also undergo thorough testing for contaminants.

Current sediment testing protocols for dredging in the Columbia River prescribe in detail the nature of the sediment testing required before each dredging action. The Port contracts for these tests with Hart Crowser, a reputable independent contractor with extensive experience in sediment analysis. The Port submits the test results to a multi-

agency taskforce for review and approval. Conditions on dredging and disposal flow from that independent review. This process has been in place for the last 2 years. (John – do you want to elaborate on this?)

III. Use of sediment after dewatering activity

Upland disposal sites are difficult to secure for contaminated sediments, however the project description did not include mention of disposal alternatives, including capping methods. No upland disposal sites were identified that would accept the dredged sediment after dewatering. We are concerned with the Port's poor track record for responsible disposal of dredged sediment and wish to see a list of proposed sites under consideration for acceptance of these dredged sediments.

Many disposal sites including urban landfills will gratefully accept the material. The Port does not intent to cap the material on site after dewatering. Instead we intend to move it offsite for possible use as construction fill in areas to be paved. Such areas exist at T-4 in the area to be repaved for Toyota and in Rivergate in the rail yards. The Port is a regional leader for the innovative use of dredged material. For 20 years we have sought the beneficial reuse of dredged material and more often than not have been successful. We find Ms. Bell's opinions regarding our track record to be both ill informed and lacking in substance.

Conclusion

For the reasons listed above, we believe the Port's proposed activity does not at this time qualify for a work permit at this site. The permit application does not consider cumulative impacts, fish and wildlife protections, water quality, nor land use issues. Until such questions are answered, dredging at Terminal 6 should be delayed.

We believe Ms. Bell and NWEA are in error. The cumulative impacts are non-existent as fill is removed from the site. There are no water quality impacts and the site is zoned for this use as industrial property.

Thank you for the opportunity to provide clarification on the issues alleged in both letters.

November 6, 2000

U.S. Army Corps of Engineers
ATTN: CENWP-OP-GP (Ms. Linton)
P.O. Box 2946
Portland, OR 97208-2946:

RE: Port of Portland application for 5-year dredging permit at Terminal 6

Dear Ms. Linton:

Northwest Environmental Advocates (NWEA) submits these comments on the Port of Portland's (the Port) application for maintenance dredging of the Terminal 6 berths on behalf of its members, many of whom reside, work, and recreate in the Lower Columbia and Willamette Rivers. NWEA has worked to bring attention to and solve the environmental problems facing the Lower Columbia River since 1988, including advocating for National Estuary Program designation, co-chairing the Bi-State Lower Columbia River Water Quality Study, preventing new pollution sources to the river, publishing the educational map Columbia River: Troubled Waters, taking the public on RiverWatch educational boat tours of the Columbia and Willamette Rivers, and using legal advocacy to implement the water quality-based regulatory programs of the Clean Water Act.

In light of the potential for impacts on endangered aquatic species from this project, we believe it is premature for the Corps to invite public comment before the U.S. Fish and Wildlife Service and National Marine Fisheries Service have submitted their comments. Therefore, we are requesting an extension of the public comment period until those documents are available for public review.

It is our opinion that the Corps cannot issue this permit for the reasons below, including that state law prohibits approval of activities that will contribute new loads into water quality limited streams, violate Oregon's antidegradation policies, and that the proposed project will cause and/or contribute to both short- and long-term violations of state water quality standards. The proposed project does not conform to Oregon water quality standards, Oregon's rules, or the 404(b)(1) Guidelines of the Clean Water Act.

Specifically, we are concerned with

- the existence of contaminated sediments at Terminal 6 berths;
- sediment containment at the dewatering facility;
- the absence of wetland delineation at proposed dewatering facility;
- testing of effluent for contamination, and;
- the use of dewatered sediments as 'clean fill.'

I. Dredging of sediments at Terminal 6 berths

Dredging of contaminated sediments at Terminal 6 will result in the resuspension and redistribution of contaminants such as tributyltin and DDT. Results of sediment testing at this site were not made available in this public notice, despite the known presence of such toxins. Sampling and testing protocols for the sediment evaluation mentioned in the project description, including locations and sample sizes, were not articulated. Dredging of such sediments will result in localized turbidity and resuspension of contaminants making them available for reintroduction into the food chain.

None of the maps presented in the Public Notice materials include dates indicating when the hydrographic data was collected, nor tenant and ship design information upon which the dredge prism was based on. Furthermore, much of the information included on the maps was illegible, despite the fact that the information was not included in the text portion of the Public Notice and critical to gauge the scope of the proposed work. WE have requested copies of this material, but were unable to obtain it prior to the comment period deadline.

II. Dewatering facility

The proposed dewatering facility is located on a site that has not undergone a wetlands delineation, though its close proximity to two existing wetlands might suggest that more wetland habitat might exist within the site boundaries. Aerial photography suggests the existence of vegetation on the east portion of the site, yet no inventory of the flora and fauna of the site was presented with this public notice.

We find it difficult to believe that no environmental zone (E-zone) review would be required for a project of this size located just three feet from the E-zone boundary. No mention was given to the method by which the dewatered sediment would be contained within the site, particularly given its dubious 'clean' status and proximity to the E-zone. The 5-year duration of this permit would suggest that the dredging project would proceed off and on, to meet the annual needs of maintaining the five berths. However, the 10" HDPE supply and discharge pipes are said to be temporary on public notice materials, and in fact only in place 2-4 weeks. (personal communication, 11/6/00 Jane McFarland, Port of Portland) Since these pipes would not qualify as a utility corridor, we question the Port's interpretation that the project is exempt from E-zone review.

The public notice made vague reference to sediment testing before dredging and disposal activities, but lacked mention of testing that would be performed on effluent from the facility. Before the water is released back into the Oregon Slough, we would expect that it would also undergo thorough testing for contaminants.

III. Use of sediment after dewatering activity

Upland disposal sites are difficult to secure for contaminated sediments, however the project description did not include mention of disposal alternatives, including capping methods. No upland disposal sites were identified that would accept the dredged sediment after dewatering. We are concerned with the Port's poor track record for responsible disposal of dredged sediment and wish to see a list of proposed sites under consideration for acceptance of these dredged sediments.

Conclusion

For the reasons listed above, we believe the Port's proposed activity does not at this time qualify for a work permit at this site. The permit application does not consider cumulative impacts, fish and wildlife protections, water quality, nor land use issues. Until such questions are answered, dredging at Terminal 6 should be delayed.

Sincerely,

Nina Bell
Executive Director

Childs, John

From: Linton, Judy L NWP [Judy.L.Linton@nwp01.usace.army.mil]
Sent: Tuesday, November 07, 2000 3:24 PM
To: 'HERMAM@portptld.com'
Subject: FW: Terminal 6 dredging

Marcel: additional comments re: T-6 dredging

-----Original Message-----

From: Duncan Brown / Lyn Mattei [mailto:matteibrown@earthlink.com]
Sent: Tuesday, November 07, 2000 2:21 PM
To: Judy Linton; Lori Warner
Subject: Terminal 6 dredging

Dear Judy

Thank you for the time to submit my concerns regarding COE Action ID # 2000-00950, DSL #RP-7391 to writing one day after the official close of the comment period. These views represent those of the Oregon Chapter Siera Club which has over 11,000 members in Oregon.

The Port of Portland is requesting a five year permit to maintain the berths at Terminal 6 to the depth of -40 feet NGVD, with a two-foot overdredge. Maintenance dredging at Terminal 6 is currently authorized by a COE permit which expires 9-30-2001. Sediments would be removed by clamshell dredging and and disposed at a proposed dredge maaterial rehandle facility on upland owned by the Prt of Portland east of Terminal 6. This would involve dewatering of the sediments with return flow to the Columbia River, with testing of sediments prior to dredging and disposal activities. Following dewatering, the sediments would be removed from the site and used as clean fill or taken to a permitted landfill.

1. The sediments in the material to be dredged contain contaminants. They tested high in Tribunal 10 and were flagged for DDT at a reported 49 rating. The DDt tests way above the bio accumulation trigger. This makes safe upland disposal difficult to find. Termimal 6 contains toxic contamiants similar to those found in the Portland Harbor, just upstream, and should be treated with the same caution and testing requirements. The results should be carefully analyzed prior to any permit issuance.

2. The project description assumes that the dewatering process would produce clean enough liquid to return directly to the Columbia River. We are aware of no studies that verify that clean liquids come from contaminated spoils. The dewatering system and its product must be independently tested and approved before allowing disposal of dewatered liquids in the Columbia River.

3. The chosen disposal site on Port of Portland property just east of the dredge site appears in aerals to be filled wetland. The area is surrounded by a dike to enclose dredged spoils and some wetland vegetation appears to be reemering there. An aerial study should be

performed to determine when this side was filled and whether the Port had obtained the required 404 and RF permits. Filling a wetland illegally does not justify further permitless fill and development.

Thankyou for your consideation,

Lyn Mattei
Oregon Chapter Sierra Club
Wetland Cordinato(503) 288-1750